UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,082	11/27/2006	Masahito Osawa	P30537	9910
	7590 08/10/200 & BERNSTEIN, P.L.		EXAMINER	
1950 ROLAND	CLARKE PLACE		FOGARTY, CAITLIN ANNE	
RESTON, VA 20191			ART UNIT	PAPER NUMBER
			1793	
			NOTIFICATION DATE	DELIVERY MODE
			08/10/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com pto@gbpatent.com

	Application No.	Applicant(s)				
Office Action Comments	10/598,082	OSAWA ET AL.				
Office Action Summary	Examiner	Art Unit				
	CAITLIN FOGARTY	1793				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>30 Ap</u>	nril 2009					
	action is non-final.					
·=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
ologod in addordance with the practice and c	x parte gaayle, 1000 G.B. 11, 10	0.0.210.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-5</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-5</u> is/are rejected.						
7) Claim(s) is/are objected to.						
· ·	election requirement					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner	•					
10)⊠ The drawing(s) filed on <u>17 August 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
TT) The path of declaration is objected to by the Ex-	anniner. Note the attached Office	Action of form FTO-192.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
 Certified copies of the priority documents 	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents	have been received in Application	on No				
3. Copies of the certified copies of the prior	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
• • • • • • • • • • • • • • • • • • • •						
Attachment(s)						
1) Undice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Art Unit: 1793

DETAILED ACTION

Status of Claims

1. Claims 1-5 are pending where claim 1 has been amended.

Status of Previous Rejections

2. The 35 U.S.C. 102(b) rejection of claim 1 as being anticipated by JP 2001-226722 has been maintained.

The 35 U.S.C. 103(a) rejection of claims 2 – 5 as being unpatentable over JP 2001-226722 has been maintained.

Oath/Declaration

3. The new declaration filed April 30, 2009 has been entered and now identifies the citizenship of each inventor.

Claim Rejections - 35 USC § 102

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 2001-226722 from the IDS (hereinafter JP '722).

The amendment to claim 1 merely places the claim in accordance with U.S. practice and did not change the scope of the claim. Therefore, JP '722 is applied to instant claim 1 as set forth in the February 5, 2009 Office action.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 1793

7. Claims 2 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-226722 from the IDS (hereinafter JP '722).

JP '722 is applied to claims 2 – 5 as set forth in the February 5, 2009 Office action.

Response to Arguments

8. Applicant's arguments filed April 30, 2009 have been fully considered but they are not persuasive.

Arguments are summarized as follows:

a. The melting method of JP '722 is a technique of manufacturing a REM-Mg system alloy having a low melting point in advance, using it as an additional starting material to lower the temperature of a REM-Ni series alloy melt and control composition change caused by evaporation of Mg, and thus obtaining a Mg-REM-Ni alloy of the requested composition. In contrast, the present invention discloses the technique of melting REM starting material and Ni starting material to obtain a REM-Ni alloy melt, adding Mg starting material, further setting the alloy melting temperature at the time of Mg starting material being added at the appropriate range, controlling the pressure in the melting furnace after Mg starting material is added so that the alloy melting temperature could be controlled in the appropriate range and that the evaporation of Mg could be inhibited, and thus obtaining the desired Mg-REM-Ni alloy.

Art Unit: 1793

b. JP '722 does not disclose a second step of adding Mg starting material to the melt of REM-Ni alloy and keeping a pressure inside the melting furnace at a given level to obtain a melt of Mg-REM-Ni alloy.

c. The present invention discloses the method of obtaining the desired compound alloy of high precision by melting Mg having high vapor pressure and a metal having a higher melting point than Mg. In contrast, JP '722 includes the premise that the corresponding alloy, i.e., REM-Mg alloy, already exists and does not provide disclosure how to obtain this alloy.

Examiner's responses are as follows:

- a. The instant application does not define the term "Mg starting material" and thus the REM-Mg system alloy of JP '722 is considered a Mg starting material.

 Therefore, as discussed in the February 5, 2009 Office action, the instant method is anticipated by JP '722.
- b. As discussed above, the Examiner maintains the position that the Mg starting material of JP '722 is the REM-Mg system alloy. Furthermore, [0016] of JP '722 discloses that the REM-Mg system alloy is supplied to the REM-Ni series alloy melt which is the second step of instant claim 1. Although JP '722 does not specifically teach that during the second step the pressure inside the melting furnace is kept at a given level to obtain a melt of Mg-REM-Ni alloy it is an inherent feature of the method of JP '722 since the furnace is maintained in a vacuum state and the elements are maintained in the melted state.

Art Unit: 1793

c. The instant claims do not include the method steps for the formation of the Mg starting material and therefore JP '722 is not required to teach these steps.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAITLIN FOGARTY whose telephone number is (571)270-3589. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/ Supervisory Patent Examiner, Art Unit 1793

CF